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10/075,570	02/13/2002	Yasuyuki Shintani	MTS-3306US	3211
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2632

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/075,570

Applicant(s)

SHINTANI ET AL.

Examiner

Son M Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/13/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 21-34 is/are rejected.
- 7) ☒ Claim(s) 19,20 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/4/03 & 8/28/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims **31-32** are rejected under 35 U.S.C. 101 because

the claimed invention is directed to non-statutory subject matter. “a program of causing...” constitutes a computer software program.

### ***Claim Objections***

3. Claim **29** is objected to because of the following informalities: In line 9, phrase “is equal to larger than” is indefinite, it seems like it needs --or-- in between equal and large. Appropriate correction is required.

4. Claims **19-20** are objected to as follow:

In the method claim, each of the method steps should start with –ing wording.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims **23-24** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**In claim 23:** It is unclear which terminal address is being referred to (e.g. is it selected from the address table?) on line 2. On lines 2-4 “a request to change the terminal address... invalidate the master function are received” where are the request information come from. Should be further defined, since there are “a device” and “other devices”.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsubone [US 2003/0107471].

**Regarding to claim 14:** Tsubone discloses a device [10] connected to a communications network with performs data communication through a power line, comprising a house code notification including a house code to be uniquely set for the communications network system is received from another device [20] connected to the communications network system [as shown in Fig. 1-2 and ¶ 0045-0052].

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-13, 15-18 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubone [US 2003/0107471] in view of Issa [US 5,945,936].

**Regarding to claims 1 and 3:** Tsubone discloses a communication setting method for a communications network system for performing data communications among a plurality of devices through power line, comprising: -a house code notification including a house code to be uniquely set for the communications network system is transmitted from a first device (10) in the communication network system to a second device (20) in the communications network system in a first predetermine time period [as shown in Fig. 1-2 and ¶ 0045-0052], Tsubone does not specifically disclose that transmitted more than once in the first predetermined time period for reception at the second device in a second predetermined time period. However, Issa teaches a code transmission method which is transmitted data to receiver more than once in the first predetermined time period [see col. 3, lines 5-12]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to implement a transmission method of Issa in the system of Tsubone, in order to insure that the signal is received through use of the multiple transmission, whereby said reception at the second device in said second predetermined time period corresponds to such transmission in the first predetermined time period.

**Regarding claim 2:** Tsubone and Issa discloses all the limitations as described above, except for not specifically mention that the house code notification includes house code has not been set, but Tsubone further stated that house code obtained by performing the on-to-one

mapping on the terminal identifier to which uniqueness is assured [see ¶ 0044] that constitutes of the house code has not been set, since it would prevent of interference with other system.

**Regarding claim 4:** Tsubone and Issa discloses all the limitations as described above, they are not specific that different house codes in the second predetermined time period, the second device discards the house codes. Tsubone had stated that the set house code and the tentative house code being compared for coinciding in the second device [see ¶ 0050], therefore, it is obvious that if the house code is a different house code in the second predetermined time period the second device discards house code.

**Regarding claims 5-6:** Tsbone and Issa discloses all the limitations as described above, they lack of specify the detail steps of a transmission concept that, after holding the house code, the second device transmits and address setting request includes a terminal identification code uniquely identifying the second device to the first device. Tsbone further teaches that the first device 10 is exchanging information to second device 20 and terminals (10, 20 and 30) each having the MAC address format in the memories (13, 23 and 33) [as shown in Fig. 1, ¶ 0060], and since, the control processor is being programmed to perform an exchange information back and front as to set up house code described above, and as long as, first and second devices capable to exchange information. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to implement any appropriate software program to performing steps including that request a terminal identification code including address of a second device.

**Regarding claim 7:** Tsbone and Issa discloses all the limitations as described above, except for not specifically teach that the house code notification starts transmitting by a user

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operation. Tsbone shows that in order for first device communication with second device, user must selected which master/slave designate switch. Thus, it would have been obvious to one having ordinary skill in the art to recognize that the house code notification starts transmitting by a user operating the selection switch.

**Regarding claim 8:** Tsbone and Issa discloses all the limitations as described above, but not specifically show that the second device enters a waiting state for receiving a house code notification if the house code is not set when power is turn on. Since, it is take at least couple of steps of exchanging information between first and second devices before the house code is set, therefore, it would have been obvious that the second device enters a waiting state for receiving a house code when power is on.

**Regarding claim 9:** Tsubone discloses a communication setting method for a communications network system for performing data communications among a plurality of devices through power line, comprising: -a house code notification including a house code to be uniquely set for the communications network system is transmitted from a first device (10) in the communication network system to a second device (20) in the communications network system in a first predetermine time period [as shown in Fig. 1-2 and ¶ 0045-0052], Tsubone does not specifically disclose that transmitted more than once in the first predetermined time period, since, the communication concept steps can be performed by implement software programming in the communication control processor, i.e. transmitting multiple times in one predetermined period or re-transmit in a multiple predetermined periods etc. Therefore, Issa teaches a code transmission method which is transmitted data to receiver more than once in the first predetermined time period [see col. 3, lines 5-12]. It would have been obvious of one having

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ordinary skill in the art at the time of the claimed invention, to implement a transmission method of Issa in the system of Tsubone, in order to insure that the signal is received.

Tsubone fails to specify that the house code is being successively received at predetermined time in a second predetermined time period, it known in the art that a complete data signal reception is determined by a predetermined time and if first predetermined time attempt is not successful, it is re-transmit for the second predetermined time. Examiner taken Official Notice that re-transmits in a second predetermined period is known in communication art.

**Regarding claim 10:** Refer to consideration of claim 1.

**Regarding claim 11:** Refer to consideration of claim 2.

**Regarding claim 12:** Refer to consideration of claim 5.

**Regarding claim 13:** Refer to consideration of claim 7.

**Regarding claim 15:** Refer to consideration of claim 1.

**Regarding claim 16:** Refer to consideration of claim 4.

**Regarding claim 17:** Refer to consideration of claim 5.

**Regarding claim 18:** Refer to consideration of claim 8.

**Regarding claims 31 and 33** are rejected as in the consideration of claim 1.

**Regarding claims 32 and 34** are rejected as in the consideration of claim 3.

11. Claims **22-25 and 29-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubone [US 2003/0107471] in view of Momona [US 5,815,660].



**Regarding claim 22:** Tsubone discloses a device (10) which has a master function (14), and is connected to a communications network system which performs data communications through a power line, comprising:

-the master function 14 is to set a house code to another device (20), and the device comprises means (13) of storing a terminal address [see Fig. 1 and ¶ 0045-0050 and 0060], Tsubone does not specifically disclose an address table holding terminal addresses assigned to other devices. It is common of master unit comprises an address table which contains terminal addresses, Momona teaches a system wherein a master unit communicates with a slave unit which comprises an address table 104 that stored addresses of other units [see Fig. 11, col. 7, lines 45-50]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to implement an address table as taught by Momona, in the system of Tsubone for the benefit of store/hold multiple terminal addresses in a large network system and enhances house code setting more precisely and quickly.

**Regarding claims 23-24:** Tsubone and Momona discloses all the limitations as described above, they fail to specifically mention that a request to change the terminal address, and a request to invalidate the master function, since Tsubone has showed that master unit and slave unit are exchanging information and responding to any transmitted signal to each other as shown in claim above. Therefore, it would have been obvious of one having ordinary skill in the art at the time the invention was made, to implement a program of any appropriate procedure steps in the processor, including the steps of request to change the terminal address, and invalidate the master function after the setting is completed.

**Regarding claim 25:** Tsubone and Momona discloses all the limitations as described above, except for not specifically mention that the address table includes address assignment information indicating whether or not a terminal address has been assigned. It is common that an address table uses to hold multiple addresses in a memory registers, and they can be assigned to a new item, device or terminal, thus, Examiner takes Official Notice that in the address table includes address assignment information to indicate that whether an address has been assigned to a particular item, device or terminal or not.

**Regarding claim 29:** Tsubone discloses a device (10) connected to a communications network system which performs data communications among a plurality of devices (20, 30) through power line, whereby the packet (40, 41) reply request between two devices in a predetermined time period [see Fig. 1 and ¶ 0045-0053 and 0060], and the number of pieces (size) of the address assignment information being transmitted in the transmission is inhered in the communication system, in order to determine exactly what information is being transmitted (in term of bits). Tsubone does not specifically disclose that an address table holding terminal addresses assigned to other devices. It is common of master unit comprises an address table which contains terminal addresses, Momona teaches a system wherein a master unit communicates with a slave unit which comprises an address table 104 that stored addresses of other units [see Fig. 11, col. 7, lines 45-50], except for not specifically mention that the address table includes address assignment information indicating whether or not a terminal address has been assigned. It is common that an address table uses to hold multiple addresses in a memory registers, and they can be assigned to a new item, device or terminal, thus, Examiner takes

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Official Notice that in the address table includes address assignment information to indicate that whether an address has been assigned to a particular item, device or terminal or not.

It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to implement an address table as taught by Momona, in the system of Tsubone for the benefit of store/hold multiple terminal addresses in a large network system and enhances house code setting more precisely and quickly.

**Regarding claim 30:** Tsubone and Momona discloses all the limitations as described above, except for not specifically mention that the address table records a number of times of no reply in response to the reply request for each assigned terminal address and no-reply exceeds a predetermined value is changed from assigned to unassigned. Since, Tsubone teaches that if the response signal is not reached when a waiting timer expired the communication is judged as error [see ¶ 0052], therefore it would have been obvious to one having ordinary skill in the art to recognize that when number of times of no-reply exceeds a predetermined value, the information is not received and not assigned.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Go et al. [US 5,305,355], Sargeant et al. [US 5,491,463], Nishijima et al. [US 5,061,922], Fisher et al. [US 6,085,191], Gilbert [US530,896], Campbell et al. [US 4,200,862], Redgate et al. [US 6,281,784], Ballegeer et al. [US 4,495,573], Yoshida [US 4,872,003] and Kim [US 6,750,781].


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M. Tang whose telephone number is (571)272-2962. The examiner can normally be reached on 4/9 First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang

  
**BENJAMIN C. LEE**  
**PRIMARY EXAMINER**